

COMPUTERLINE

A QUICK READ ON TRENDS IN PERSONAL COMPUTING

Computer lets them see how people hear sounds

Michigan State University researchers have developed a technique that will enable physicians to "see" how people hear. With a system based on an IBM Personal Computer, sounds are sent into the ear via a hearing aide-like probe. After the sounds travel through the cochlea and bounce off the eardrum, the echos are digitized by the probe and graphed on the computer's screen as a sine wave. If the sine wave from the echo differs markedly from the sine wave of the original sound — also graphed on the screen — it may be an indication of a hearing problem. The system is being tested on MSU students to establish a range of normal hearing. It could be particularly useful to test the hearing of babies, who cannot acknowledge they hear a sound the way an adult would. "Studying with PCs may become a normal diagnostic tool that could find its way into medical practice within the next few years," says MSU's Dr. Ernest J. Moore.

White glove has computer in palm of hand

Sharedata Inc. thinks it has a grasp on what personal computer owners want. This fall the Eden Prairie, Minn., company will begin selling a \$35 white glove that lets you give your computer a command by just moving your hand. Move the cotton glove — called HandCommand — left and the cursor, which also resembles a hand, moves left. Clench your hand and the on-screen hand will grasp the object that you're aiming for, say, a chess piece. How does it work? Sensors are mounted on the monitor. As you move your hand in front of it, the sensors pinpoint, or triangulate, the hand's position and adjust the cursor on the screen. PC owners won't be the only ones using it. The National Aeronautics Space Administration is experimenting with a version of the glove, which was developed by VPL Research Inc. of Palo Alto, Calif. From the safety of a cabin, an astronaut might use it to move a robot arm outside a spacecraft.

System helps patients speak



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